11.0 RESPONSE TO COMMENTS

This section of the DEIR provides individual responses to the public and agency comments received on the Environmental Notification Form (ENF) for the Gloucester Harbor DMMP. In this section, each comment letter is addressed in a specific subsection, with individual comments listed, followed by a response to the comment. Letters are addressed in the order in which they are listed in the MEPA ENF Certificate of April 24, 1998.

Comments are presented in italicized text for ease in distinguishing between comments and responses. Where appropriate, the response may direct the commentator to the specific sections of the DEIR where the comments are answered. The Certificate of the Secretary of Environmental Affairs is included in the front matter of this report, the remaining comment letters are included in Appendix A.

11.1 Certificate of the Secretary of Environmental Affairs on the Environmental Notification Form

Comment: *Project Description, Purpose and Need - The EIR should contain a full description of the project that includes a description of the purpose and need for the DMMP in Gloucester Harbor.*

Response: A full description of the Gloucester DMMP is included in Section 1.0, Executive Summary. Purpose and Need for the project is addressed in Section 3.0.

Comment: *Sediment Quality and Quantity - The EIR should contain an analysis of the quality and quantity of dredged material for DMMP dredging projects in Gloucester Harbor. It should summarize dredge sampling and testing programs and discuss conformance with DEP and Army Corps/EPA requirements, including physical, bulk chemistry and any required biological testing. The EIR should also identify low, medium and high volume dredge volume estimates in consultation with Gloucester Working Group and Harbor Plan Committee. For overdredge and adjacent to channel aquatic disposal alternatives, it should provide a summary of results of subsurface investigations.*

Response: Section 3.3 includes a complete discussion of the quality and quantity of the dredged material for the Gloucester DMMP. Please note that the DEIR analysis assumes conservative UDM volume estimates, roughly corresponding to the "high volume" dredging estimates included in the ENF. This approach has been taken to ensure that disposal site planning considers the maximum volume of UDM that may need to be disposed. Future chemical and biological, if required, analyses of individual dredging projects will pinpoint the capacity required for the final disposal sites or alternative treatment technology.

Comment: *Identification of Disposal Alternatives - The EIR should identify the full range of practicable disposal alternatives considered under DMMP Phase I, including:*

a. Alternative Technologies and Methodologies - Identify potential alternative technologies, and discuss operational requirements, regulatory feasibility, and characteristics of output and sidestream flows and associated environmental impacts. Based on these factors, identify potentially practicable technologies.

b. Upland Reuse/Disposal - Identify potential upland alternatives within the municipal boundaries of Gloucester, consistent with existing DEP regulations and policy. Also consider the use of brownfield sites consistent with DEP policy and the Massachusetts Contingency Plan.

c. Aquatic Disposal - Identify all potential aquatic disposal alternatives as defined under DMMP Phase I within the Gloucester Zone of Siting Feasibility, consistent with Army Corps operational policies and Clean Water Act, Section 404 provisions.

Response:

a. Alternative Technologies and Methodologies: Section 4.5 summarizes the Alternative Technologies and Methodologies analyzed for the DMMP.

b. Upland Reuse/Disposal: Section 4.7 summarizes the Upland Reuse and Disposal Alternatives analyzed for the Gloucester DMMP.

c. Aquatic Disposal: Section 4.8 summarizes the Aquatic Disposal Alternatives analyzed for the Gloucester DMMP.

Comment: *Screening of Disposal Alternatives - Perform a first order screen of disposal alternatives for impacts to natural resources, permitting feasibility, engineering characteristics, capacity, cost, logistics, and users conflicts, based on existing information. Screening criteria used in the analysis should be developed in consultation with local interests and state and federal resource agencies. Identify potentially practicable alternatives resulting from the screening.*

Response: Sections 2.0 and 4.4 of the DEIR describe the coordinated development of the DMMP screening criteria with local interests, state and federal regulatory agencies and the specifics of the DMMP screening process. Sections 4.5, 4.6, 4.7 and 4.8 of the DEIR provide a summary of the first order screen for each type of disposal alternative considered, including the identification of potentially practicable alternatives resulting from the screening.

Comment: *Fisheries Investigation and Monitoring - The proposed fisheries studies are intended to fill information voids relative to the present status of marine resources in specific areas so that the potential impacts from dredging and in-water disposal can be determined. These studies will complement other resource investigations either currently underway or recently completed by the Division of Marine Fisheries (DMF).*

The important marine fisheries resources in Gloucester Harbor are shellfish (soft shell clams), lobster, and finfish. Very little information is currently available on these resources in Gloucester Harbor.

Juvenile lobster and shellfish surveys shall be site specific, and shall be conducted at the areas identified within each study site, below, subject ot final direction from DMF and MCZM.

<u>Finfish</u> - Finfish will be sampled twice monthly at 3-4 stations from May through October and once monthly from November through April in Gloucester Harbor with a standard DMF 30' shrimp trawl.

Sampling stations will be selected based on historical sampling sites and the specific information required for the DMMP. In addition, haul seining will be conducted with a 50' bag seine at 2-3 stations twice monthly from May through October and once monthly from November through April. Sampling sites will be selected based on historical sampling and other information including site suitability for haul seining. Fish will be enumerated, total weights by species and important species length frequencies obtained.

Lobsters - Juvenile lobsters (carapace length ,40 mm) will be surveyed in August in both the purposes dredge area and aquatic sites identified on DMMP project maps as ATC, CAD and the Fish Pier CDF. A diver operated suction device will be utilized to obtain quantitative information on juvenile lobsters. Twelve randomly placed 0.5 m^2 quadrats will be sampled in each site. Samples will be enumerated and compared to other similar investigations in state waters. It is noted that while this method of EBP lobster assessment is experimental, it is rapidly becoming the standard for evaluating juvenile lobster habitat.

Lobster sea sampling is routinely conducted by the Division to obtain both biological and commercial harvest information. Although sea sampling is proposed specifically in Gloucester Harbor. Sea sampling is proposed specifically to obtain catch information within Gloucester harbor and, if possible, proposed dredge and in-water disposal sites. Catch ratio will be compared to other lobster producing areas in the state waters. Sea sampling will be conducted by monitoring the normal operations of one or two commercial lobster men within the harbor and specific areas collected for disposal.

Sampling will be conducted twice each month from May through November. Standardized information will be collected to calculate catch rates as well as biological information.

Shellfish - The EIR should contain the results of a shellfish survey performed to locate and evaluate shellfish resources in the harbor. Shellfish resources should be plotted on a map of reasonable scale in the EIR.

Response: Section 4.8 of the DEIR provides a detailed screening of aquatic disposal alternatives which include an assessment of benthic impacts in Section 4.8.3 and finfish impacts in Section 4.8.4. Section 6.1.3 provides a detailed assessment of impacts to benthic species, while Section 6.1.4 provides a detailed assessment of impacts to finfish for aquatic disposal alternatives. Additionally, DMMP research documents including; Fisheries Survey for Gloucester and Early Benthic Phase Lobster Survey for Gloucester Harbor are included in Appendix G.

Comment: *Characterize identified potentially practicable sites in terms of: engineering, physical, chemical, and meteorological characteristics; quantify natural resource impacts; identify permitting requirements; cost; capacity; and operational requirements, based on site specific conditions.*

Response: Sections 5.0 and 6.0 of this DEIR provides engineering, physical, chemical, and meteorological characteristics and quantification of natural resource impacts for potentially practicable site and the preferred alternative sites. Appendix F contains the Habitat Characterization study that served as the baseline for the analysis of the above sections.

Comment: *Identify, in consultation with Gloucester officials and other interested organizations and individuals, a preferred alternative(s)and/or methodology(s). Identify mitigation requirements and identify the parties responsible for implementation of mitigation measures.*

Response: The disposal site screening process has been closely coordinated with City of Gloucester and key harbor stakeholders, as described in Section 2.0 of this DEIR. The Draft Section 61 Findings, Sections 8.0 and 10.0, identify mitigation requirements specific to the aquatic preferred alternative sites.

Comment*: Disposal Site Management Plan*

The EIR should contain a draft disposal site management plan detailing measures to be taken to ensure protection of the public health and welfare and to properly manage the construction and operation of the preferred disposal alternative. It should also identify parties responsible for implementation of the plan.

Response: The Disposal Site Management plan, detailing measures to be taken to ensure protection of the public health and welfare and to properly manage the construction and operation of the preferred disposal alternative sites, is included as Section 9.0 of this DEIR. This section also identifies potential parties responsible for implementation of the DMMP.

Comment*: Draft Section 61 Findings*

The EIR should contain a draft Section 61 Finding for the preferred alternative. This finding should set out what mitigation is available to minimize or eliminate environmental impacts.

Response: Section 10.0 of this DEIR includes the Draft Section 61 Findings outlining mitigation available to minimize or eliminate environmental impacts.

Comment*: Federal permitting requirements*

The EIR should contain, as appropriate, the draft federal Endangered Species Act Section 7 consultation and draft Clean Water Act Section 404(b)(1) analysis.

Response: Section 7.2.1 includes a draft Clean Water Act Section 404(b)(1) analysis for the preferred aquatic disposal sites in Salem Harbor. As the preferred aquatic disposal sites are located outside of any federally-listed Endangered Species habitat areas, a draft ESA Section 7 consultation is not included in this DEIR. Consultation and coordination with the NMFS and the USFWS is continuing to determine the need for a formal Section 7 consultation process.

11.2 Department of Environmental Protection

Comment: *DEP experiences with CA/T materials (both excavate and dredged sediments) have demonstrated that even though there initially appeared to be a fairly large demand for these materials at public (or private) landfills, the reality was that very few landfills actually decided to use the materials. In addition, by 1999 most unlined landfills in Massachusetts will be capped, the exception being a category of historic landfill disposal sites, most of which have been unused for*

over 30 years, and the potential for placement of significant volumes of dredged sediments at any of these sites is questionable and severely limited at best. Nevertheless, the DMMP should fully assess any and all historic landfills and DEP will work with the consultant in this activity.

The ENF specifically refers to [the] existing municipal solid waste landfill in ... Gloucester (40-acre site)... Relative to the 40-acre Gloucester Landfill, as indicated previously in this, correspondence, the City previously attempted to dispose of sediments at the site and was forced to cease the activity due to complaints of noxious odors. The site is currently implementing closure and capping activities which are expected to be completed in 1999, thereby making the site unavailable for sediment disposal.

Response: MCZM has worked in consultation with the DEP on the inclusion and assessment of historic landfills within 50 miles of Gloucester Harbor in screening of upland disposal sites. This analysis is described in detail in Section 4.8.

Comment: *The DMMP estimates a total volume of ... 727,200 cubic yards of dredged material unsuitable for unconfined ocean disposal for the port... of Gloucester ... DEP fully supports the conclusion in the Phase I DMMP that this large volume and physical/chemical quality of dredged material drives an informed alternatives analysis; one that must carefully review all possible mechanisms for both in-water and upland disposal/reuse.*

Response: This comment is acknowledged. The DMMP disposal site screening analysis involved a comprehensive analysis of all practicable alternative treatment technologies, upland and aquatic disposal options, including a detailed review of potential dewatering sites, a key mechanism to implementing upland and alternative treatment technology disposal options.

Comment: *Upland Disposal/Reuse at Locations Subject to Jurisdiction of M.G.L. c, 21 and the Massachusetts Contingency Plan, 310 CMR 40.0000 et. sec.*

"Despoiled Areas," "Brownfields", and 21E Sites

The ENF states that, should an upland disposal/reuse alternative be selected, ... use of already despoiled areas, such as a "brownfield" site are preferable to pristine areas. Potentially contaminated areas of an otherwise suitable brownfield site will be identified via the Environmental Site Assessment Process under M.G.L. c. 21E and the Massachusetts Contingency Plan (310 CMR 40.0000) (Page 7, Section III. E. 3.).

Response: Since the preferred disposal alternative for Gloucester Harbor is in the marine environment, the proposed sites are not subject to provisions Chapter 21E and the MCP.

Comment: *DEP wishes to point out that it is inaccurate to conclude that "brownfields" are synonymous with "despoiled areas." Areas that could be considered brownfields include much of downtown Boston, the commercial/retail/industrial hubs of many Massachusetts cities, and many suburban and rural locations that have hosted and continue to support a variety of land uses and activities; e.g. manufacturing, research, medical facilities, retail establishments, etc.; and would likely not be appropriate for the disposal of dredged sediments.*

Response: The comment is acknowledged.

Comment: *In addition, the phrase " ... potentially contaminated areas of an otherwise suitable brownfield site ..." suggests the type of brownfields site that, in fact, ends up proving to be "clean." Such areas would not be appropriate for the disposal of dredged sediments.*

Response: The comment is acknowledged and the Gloucester Harbor DMMP DEIR does not include such a site as a preferred alternative.

Comment: *Neither c. 21E nor the MCP define the word "brownfields." C. 21E sites are those areas that become subject to the jurisdiction of c. 21E and the MCP because they are where releases[1] of oil or hazardous material have come to be located. DEP only allows contaminated media generated at a 21E site to go to locations or facilities that are permitted or otherwise approved by DEP.*

Response: The comment is acknowledged.

Comment: *DEP understands that, if upland disposal outside of site assigned facilities is necessary, it is preferable to consider locations that have already been subject to contamination over areas that may be described as "pristine." However, DEP currently has no statutory/regulatory authority over "despoiled areas" or "brownfields"as described in the ENF statement.*

Accordingly, DEP suggests that the discussion concerning the use of non-pristine locations be restyled to consider the locations over which DEP has such authority, specifically 21E sites.

Response: The comment is acknowledged. The intent of the ENF statement regarding "pristine" areas was to express a preference for a beneficial reuse approach to a contaminated (despoiled) site over a disposal approach on a pristine, undeveloped site. MCZM understands that "despoiled areas" and "brownfields" are not regulatory definitions.

Comment: *<u>Scope and Complexity of 21E Site Remediation</u>*

DEP, while concurring with limiting any upland alternatives analysis for the disposal/reuse of dredged sediments to non-pristine areas, has several concerns about focusing on 21E sites:

- *21E sites must be remediated to a condition of No Significant Risk[2]. This is, in many instances, a complicated process and, in some cases, a process that requires years of careful oversight and treatment to achieve; and*

Response: MCZM understands that a human health risk assessment will be required if an upland disposal

[1] While 21E jurisdiction also encompasses threats of release of oil or hazardous material, these comments are limited to actual releases.

[2] A "Significant Risk" exists when a release of oil or hazardous material presents a hazard to health, safety, public welfare, or the environment if it were present even for a short time.

site subject to Chapter 21E and the MCP is selected as the preferred alternative disposal site for the Gloucester Harbor DMMP.

Comment:

(b) the awareness of the complexity of this process has precipitated DEP's ongoing development of guidelines for the use and management of dredged sediments and DEP is hopeful that it will have at least draft guidelines by November of this year [1998].

Response: MCZM concurs with the comment and is actively working with DEP to develop the draft guidelines.

Comment: *Project Permitting*

The ENF correctly indicates the various potential major DEP Permits that might be necessary to implement the construction and operation of dredged sediment reuse/disposal facilities. Depending on the alternative(s) finally chosen additional DEP permits (or technical reviews) may be required under the jurisdiction of c.111 s.150A and 310 CMR 16.000 and 19.000 (Solid Waste Review); c.21E/MCP at 310 CMR 40.000; 310 CMR 7.00 (Air Plans Review); and c.131, s.40 (Wetlands Protection Act) if a Superseding order or Variance is deemed to be necessary.

Response: MCZM acknowledges the comment.

Comment: *Waterways Permitting*

The projects will require a Chapter 91 dredge permit. If the Confined Disposal Facility (CDF)or the Tidal Habitat Creation option is chosen, a Chapter 91 license will be necessary. Chapter 91 licenses require the payment of Commonwealth tidelands occupation fees at $30/sq.yd. and tidewater displacement fees at $2.00/cu.yd. These costs may become quite prohibitive for large amounts of fill. Public agencies however are exempt from these licensing fees. So if one of these options is chosen, a public agency should be the permittee. A further requirement of the Waterways regulations at 310 CMR 9.32 (1)(b), is that within DPAs, a project shall be eligible for a license only if it is restricted to fill or structures for water-dependent-industrial use, provided that, in the case of proposed fill, neither pile-supported nor floating structures are a reasonable alternative. The EIR should address how this requirement will be met.

Response: The Gloucester Harbor DMMP has not identified a CDF or Tidal Habitat Creation option as a preferred alternative site. Therefore, the analysis requested to address the requirements of 310 CMR 9.32(1)(b) is not included in the DEIR.

Comment: *Wetlands Permitting*

There is not yet enough information on the Wetland Resource Areas likely to be impacted by these projects to determine what the requirements under the Wetlands regulations will be. For each of the alternatives under consideration, the EIR should address the following: which Wetlands Resource Areas will be impacted, the square footage of impact, whether the impact is temporary or

permanent, whether the project will require a variance, or whether it can be considered a Limited Project under the Wetlands Regulations.

Response: Section 6.1.5 quantifies the amount and type of wetland resource areas, and the duration of the impact, for all wetland resources which are potentially impacted.

11.3 Board of Underwater Archaeological Resources

Comment: *The BUAR conducted a review of its files and secondary literature sources to identify known and potential submerged cultural resources. Research strongly suggests there exists the possibility for both prehistoric and historic cultural resources, now submerged, to be located within the vicinity of Gloucester Harbor and associated dredged disposal areas. This preliminary review revealed potential submerged cultural resource (e.g., shipwrecks) in the vicinity of the study area.*

Given the geomorphological evolution of Gloucester Harbor as a possible inundation feature (limited seaward exposure reducing erosional effects), there exists the strong possibility for the preservation of now submerged prehistoric cultural resources. A regional model for the southern Gulf of Maine suggests the expected site frequency for the study area would be low for all site types dating prior to 6000 BP, but would increase from low (habitation) to high (shell middens) for the period 6000 to 3000 BP. In the period from 3000 BP to Present, the expected site frequency increases to high for habitation, camp, and shell midden sites. During both periods, the size of these sites would be small. While this model does not provide sufficient resolution to specifically identify potential site locations at the scale of the study area, it points to the need to consider the occurrence of prehistoric sites.

A preliminary review of historic literature strongly suggests there exists some reasonable concern for possible site occurrence within the proposed dredging and disposal areas. In general, we must recognize Gloucester was a major early colonial port in the region and maintained commercial and fishing importance throughout the historic period, and thus maintained a high volume of vessel traffic along the Cape. Additionally, the numerous coves along the shore provided small safe harbors and quays to support vessel outfitting, fisheries and quarry activities. At the same time, we must recognize that Cape Ann, like Cape Cod, was a major natural landscape feature that contained numerous hazards to navigation, and thus became the site of several hundred shipwrecks. A variety of maritime related cultural resources, such as wharves/piers/quays, anchorages, careening sites, derelict and shipwreck vessels, might be anticipated to be located in the project area, either submerged or along the shore.

While the vast majority of known shipwrecks occurred along the eastern and southern shores of Cape Ann, a number of shipwrecks are known to have occurred in the vicinity of the project area. Secondary sources indicate that as many as 70 shipwrecks might be located in the vicinity of Gloucester Harbor. The loss of earlier and smaller coastal vessels and the purposeful abandonment of derelict vessels are generally not found in the documentary record. The level and diversity of maritime commercial, fishing, and recreational activities throughout the Cape Ann region may have resulted in the creation of a number of undocumented and anonymous underwater archaeological sites such as small craft, derelict vessels, or dump sites. These possible site types represent classes

of vessels where our knowledge is severely limited and, thus, are potentially historically and archaeologically important.

Therefore, the BUAR takes this opportunity to express its concern that heretofore unknown cultural resources might be encountered during the course of work and hopes the project's sponsor will take steps to limit adverse affects and notify the BUAR, as well as other appropriate agencies, if historical or archaeological resources are encountered.

Response: This DEIR presents the results of an initial (Phase I) underwater archaeological investigation for Gloucester Harbor. We concur the waters of Gloucester Harbor, near the location of the preferred aquatic disposal alternative sites, are likely to contain several potentially significant archaeological sites. As noted above, MCZM will coordinate with both the BUAR to define the appropriate further investigations and identification of mitigation and avoidance measures as the DMMP site selection and disposal site design process proceeds.

11.4 Letter of Gloucester Harbor Plan Committee

Comment: *Sediment Quality and Quantity - Sediment sampling should include areas of Smith Cove previously proposed by the City for dredging.*

Response: The potential need for the dredging of Smith Cove has been brought to the attention of MCZM as potential project in our public participation process. However, because representative sediment data from the USACE is on file, new field work was determined to be unnecessary.

Comment: *Screening of Disposal Alternatives - Local consultation is a critical element, given the importance of offshore resources to local interests. The information to be used in the analysis should be locally reviewed.*

Response: The screening of disposal alternatives has been closely coordinated with the Gloucester Dredging Subcommittee. The development of screening criteria, natural resources information and results of the screening process have presented to the City at key DMMP milestones as outlined in Section 2.0.

Comment: *Fisheries Investigation and Monitoring - The existing information to be used in the screening analysis should be reviewed with local interests. The information shown in Attachment #3 does not include the entire ZSF, does not include other significant resources such as shellfish, and is incomplete with regard to some of the resources shown, e.g. recreational fishing is important throughout the area. It should be noted that there are important areas for shellfish in tidal flats along the Annisquam River. This consultation should be done before fisheries investigation sampling plans - to fill information gaps - are finalized. The actual sampling sites proposed for the finfish and the lobster investigations should be reviewed with local interests. The descriptions of the finfish and lobster surveys refer to locations in Gloucester Harbor. Does this include both inner and outer harbor areas? Will surveys be conducted in other areas of the ZSF?*

Response: Section 2.0 outlines the coordination with the Gloucester Dredging Subcommittee and DMF in developing the sampling plans and reviewing study results. Additionally, DMMP research documents

including; *Fisheries Survey for Gloucester* and *Early Benthic Phase Lobster Survey for Gloucester Harbor* are included in Appendix G.

Comment: *Project Description - The description of the need for dredging, such as is presented in this section, should note the traditional importance of the existing channels and their maintenance, both in the Harbor and the Annisquam River, to the ongoing fishing activity and other marine activity which is of significance in this community.*

Response: Section 3.0 of the DEIR describes the dredging inventory conducted for the Gloucester Harbor DMMP and documents the need for dredging identified as it relates to the mission statement, goals and objectives of the Gloucester Harbor Plan.

Comment: *Upland Reuse and Disposal - This discussion includes reference to the Gloucester Landfill as a potential existing facility which could be considered as a disposal site. The City is in the process of closing this landfill. The status and timing of the closure should be investigated to determine whether this facility would be available as a disposal option.*

Response: Section 4.7, Upland Disposal Alternatives, included the Gloucester Landfill as a potential disposal alternative. However, this site did not emerge as a preferred alternative site.

Comment: *Natural Resources Map - The information shown on this map appears to significantly underestimate the areas with important natural resources and fisheries. Accurate and complete information is essential for meaningful analysis and screening of alternatives.*

Lobsters - The inner harbor as well as the entire Outer Harbor should be included in resource maps showing lobster areas. While the Inner Harbor is closed to lobster fishing, this area is known to be a habitat area for lobster.

Response: The DMMP team has worked closely with the subcommittee and local officials to develop a comprehensive natural resources assessment. See Sections 4.0, 5.0, 6.0 for a complete discussion. DMMP research conducted related to lobster areas included the Inner Harbor. The results of this research is described in Section 4.0 and Appendix G.

Lobster and Fin Fisheries - These fisheries occur throughout the entire area of the outer harbor.

Shellfish - The map of shellfish resources (included in an earlier draft of the ENF document) is missing. Information on shellfish resources should be included in the analysis and screening of potential disposal options.

Recreational Fishery - Recreation fishing is important throughout the Annisquam River, all of the Outer Harbor and all along the shoreline areas of Cape Ann.

Response: Additional mapping and analysis of lobster and fin fisheries, shellfish and recreational fishing has been incorporated into Sections 5.0 and 6.0 of this DEIR.

Confined Aquatic Disposal (CAD) Alternatives - The sites for CAD Alternatives shown as sites 3 and

4 on Attachment 1E include active fishing areas. Fishing activity should be included in the criteria for screening to eliminated sites form consideration. Accurate information, reviewed by local fishing industry representatives, should be used in this screening analysis.

In addition, currents and tidal flows should be analyzed in considering whether material placed in such locations will remain covered or in place over time. The EIR will need to demonstrate that contaminated material would not be uncovered or transported away form any proposed disposal location. In this regard, we have particular concerns with the locations shown as Sites 3 and 4 in Attachment 1-E.

Response: Sites 3 and 4 in Attachment 1-E of the ENF, did not emerge as preferred alternatives based upon the application of screening criteria, developed jointly with input from City, State and Federal entities, because of high resources values and erosional conditions present at both sites.

11.5 Letter of Anne Montague, Montague Associates

Comment: *Please note that, overall, I feel the 20 year plan must be based on more. Examples are:*

- *Innovative technologies and methods;*
- *Designing CDFs with beneficial uses in mind, with one benefit being that life of CDFs be extended far beyond 20 yrs;*
- *Cost analyses that depend on much fuller information;*
- *Better professional and public education, for better procedures of choice.*

Response: MCZM concurs with the sentiment of the comment. It is the intent of the DMMP to research and provide such information.

Comment: *The science and technology of managing sediments is rapidly changing as technologies and methods emerge for processing a) clean and b) contaminated sediments. Decision makers and the public need to know what is possible, in order to know how to manage and use sediments.*

From review of the DMMP and public meeting I have attended, my comments center on the inadequate consideration of processing sediments and of beneficial uses of processed sediments, which, in my view, result from a lack good understanding of alternatives. The use of sediments requires integration of technology, sediments, products, uses, sites, storage, and other factors. Thus, the following comments stress looking at the whole, as well as details, by cooperating with various initiatives for better short-term to permanent solutions.

Response: The DEIR reviews fourteen classes of individual treatment technologies for their efficacy and cost-effectiveness in treating UDM. The review is summarized in Section 4.5 of this document.

Comment: *A Paradigm Shift Is Occurring, Based on Emerging Breakthroughs a) in Technologies/Methods and in b) Beneficial Uses of Sediment, which outdates conventional planning and public comment fur dredging, scheduling, cost, and port and other development. Thus, the procedures should be up-dated to accommodate progress with both clean sediments and*

contaminated sediments made environmentally safe. Some examples of new information that must be evaluated are (see throughout for others):

A. Beneficial Use Products (blocks, statues, flowable cementitious material [for fill, highway objects such as Jersey barriers. etc.), manufactured soils, artificial soils, capping materials, molded products (lampposts, flagstones), soil-erosion control blocks, roofing dies), and others.

B. Beneficial Use Sites. Wildlife habitat, wetlands (including for remediation), construction of shoreline land space (including for processing sediments), brownfields (including for processing sediments), anywhere that blocks, molded objects, soils, etc. can be used.

C. Cost comparisons are not meaningful without adequate studies of how sediment uses can a) saved [sic] money, b) help create unique, viable solutions to brownfields and industrial reuse sites, c) make products that can be sold, d) provide long-term planning of markets/uses and of remediation, c) create jobs, f) increase community pride and tourism from a beautiful communities that have been a first to reconstruct with sediments.

D. Matching sediments with products, site uses, and best technologies should be on-going. Extreme activity in finding processes and uses for sediment may help save money, resources, environment. Again, using sediments from CDFs to avoid their filling up, is one example.

E. It is usually necessary to know the specific use before finding the technology to meet a need. For example, stabilization and solidification for capping a brownfield may have different performance standards than SS technologies for landfill cover, building monoliths such as berms that might border CDFs or constructed wetlands.

F. Balancing/coordinating/integrating many factors emerges as a short-to-long term mission of dynamic problem-solving centered around people's fuller awareness and choices.

G. Open-Water Disposal of Uncontaminated Dredged Material Is A Waste of Valuable Natural Resources.

Response: The comment is acknowledged.

Comment: *III. Demonstrations of Processing Sediments into Safe Products, How Processes/Products Can Be Used Cost-effectively, and How To Do Good Cost Analyses Are Not Outlined.*

Slow but definitely emerging are:

A. Demonstrations of Contaminated Sediments Made Environmentally Safe. For many reasons

beyond product safety and viability, moneys for demonstrations have been slow, although many demonstrations are under way now. Some barriers to demonstrations are:

1) *Brookhaven National Laboratory and others first concentrated on high-tech decontamination technologies that are expensive. Many policy makers had a wait-and-see attitude about these and are only now beginning to realize that a) other decontamination technologies are emerging at lower cost and b) low-tech processes that do not decontaminate per se but make useful product that is environmentally safe and ready to be demonstrated.*
2) *Prevailing attitudes of some stakeholders is that vendors with technologies should find their own funding for demonstrations, despite the fact that these processes a) are proving in scientific and bench scale ways, and b) are proving to make useful product with clean sediment. This is unfortunate and not in the American spirit of allowing ways to solve problems for the common good.*
3) *The private-sector is slow to invest till markets are proven, which is happening, but slowed by the above bottle necks.*
4) *Research on public acceptance bas been too slow. Those who might fund objective research are afraid that their present plans will be stopped with public involvement and education. However, based on my own and others' research (e.g., brownfields managers, sediment uses on the West coast) that the public should be involved early and the public wants to know: the alternatives, that contaminated raw material will require several classes of decisions for safety (e.g., monitoring), what environmental good can come of uses, what jobs can be created, what education can come from looking at the issues, what kinds of structures can be created, and what full costs are. By and large, the public wants to face the problem of contamination, not run from it or have it hidden. We have polluted, we need to decide how to take care of what we have created, as well as how to prevent it.*
5) *Products (e.g., soils, bricks, wetlands, capping) have not been made visible to the public. Talk is absolutely insufficient.*

B. Demonstrations of Clean Sediment Products.

1) *These are evolving, including commercialization of soils from sediment, bricks and blocks for homes, security walls, and various plans for statues and other beautification projects.*
2) *These are like1y to be shorter in permitting and public acceptance.*

C. Demonstrations of Cost Effectiveness.

Cost analyses are often case-by-case. Some issues are:

1) *Profit from different processes will differ. For example, transportable manufacturing plants for bricks used for specific environmental projects such as soil/riparian erosion control will have different cost analyses than permanent plants for making aggregates and these will differ for other solutions.*
2) *Markets may have to be developed.*

3) Waste products (e.g., ash, fish gurry, glass) will have different savings, and some may bring a tipping fee to offset production cost.

4) The integration of many missions can offset costs. A few examples are:

- *Creation of nature-friendly sites such as wildlife habitat, ecoeducation sites, wetlands, plant propagation walks).*
- *Job creation efforts such as with fishermen, HUD, youth.*
- *Port development with sediment-based products that will enhance port missions and reduce costs.*
- *Brownfields/Superfund redevelopment.*

These barriers to demonstration are not long-term. However, the DMMP is for 20 years, which means there is time to introduce processes, if plans are made now for their introduction

Response: Much of the comment is not directed at the Gloucester Harbor DMMP ENF and is acknowledged. As previously noted, the DMMP carries forward all fourteen technologies investigated as potential alternatives, which includes a periodic review, every five years by MCZM, of the efficacy of alternative treatment technologies. This information will be made available to individual dredging proponents.

Comment: *IV. Confined Disposal Facilities and Contained Aquatic Disposal design should be rethought.*

A) CDFs should not be filled and then rebuilt. Sediment can be used from these CDFs to make them last much longer than 20 years. CDFs should:

a) Contain all (uncontaminated and contaminated) material that is not used, to make it environmentally safe and useful later

b) Be coordinated with beneficial uses (blocks, statues, flowable fill, soils, brown field capping and other uses, wetlands, wildlife habitat, construction of shoreline landspace. so that CDFs are neither overbuilt nor do they fill up, which will produce product and save CDF construction.

c) Be coordinated with remediation (minimize contaminant migration), so that contaminants are rendered environmentally safe, and., if possible used in appropriate ways.

A) CADs should be reconsidered. Alternatives are suggested based on:

a) Public distaste for putting contaminated sediment in an aquatic environment and not planning more than to cover it is accepted procedure; however, there have been few choices, and alternatives need to be openly considered to get to choices for determining accepted and preferred procedures.

b) Possibly creating wetlands with new know-how that has good scientific evidence of passively remediating organics.

c) Problems with monitoring CADs, which should be compared to evolving ways to monitor via constructed wetland and low-cost technologies to bind up contaminants.

Response: A CDF alternative is not proposed as a preferred alternative for the Gloucester Harbor

DMMP. Our extensive research did not identify any current alternative treatment technology or suite of technologies that can address Gloucester Harbor UDM at the volumes proposed. 1) As discussed in Section 4.5, factors of cost, emissions, residuals, available space and public sentiment argue against a viable alternative technology-based approach to the immediate need for disposal or reuse of dredged material. As discussed above, MCZM will maintain alternative technologies as an "open" category, and will actively support the integration into service those feasible technologies that emerge in the future. 2) Wetland creation often involves significant permitting hurdles, as viable sites are often considered as valuable wetland resources in themselves, and "creating" wetlands often means converting one type of resource to another; and 3) the issue of monitoring CADs is ongoing and regulatory agencies and project proponents are learning from experiences in Boston Harbor. Section 9.0 of this DEIR outlines a comprehensive monitoring program that will be implemented if the CAD preferred alternative disposal sites identified in this DEIR are constructed.

Comment: *V. Inadequate Sequence: The sequence of schedules and selections is not in synchrony with full consideration of alternatives. For example:*

A) Sites: Finding the site where sediment can be used and assessing those needs are early steps in assessing if there are adequate technologies to deliver desired products and/or materials. Since little site assessment has been done, technologies and methods, by definition, have not been adequately considered. It is usually necessary to know the specific use before finding the technology to fit. For example, stabilization and solidification for capping a brownfield may have different performance standards than SS technology for landfill cover, building monoliths such as berm that might border CDFs or constructed wetlands,

B) Therefore, sufficient search for technology and methods has not. been done.

C) Selection and summation of alternative technologies (i.e., soil washing) was typical of what might have been done a year ago, while high-tech processes were being stressed.

Response: The ENF was not intended to provide a comprehensive summary of all research conducted on alternative treatment technologies and methodologies conducted for Phase I of the DMMP. This DEIR includes a more comprehensive summary of research conducted to date, including on the specific treatment technologies identified above. Section 4.5 of this DEIR describes the alternative treatment technologies reviewed and the results of the application of the DMMP screening criteria.

Comment: *VII. Along with Emerging Technologies/Methods and Uses of Sediment, Emerging Procedures of Assessment of Alternatives are Necessary. Full professional and public awareness of alternatives and public education will take additional effort.*

Some (not all) Other Problems Include:

a) Since areas to be dredged are not fully decided, dredged material and users/uses are hard to put together, which stack the cards against a realistic look at beneficial uses.

b) The type of dredging to be used is unclear and, likewise, impacts decisions about uses.

c) Cost sharing for uses is unduly difficult to plan or assess without these and other questions answered.

d) Innovative and proven technologies have not been fully assessed, and numbers are not accurate for comparisons.

Response: The dredging inventory conducted for the DMMP serves as the most reasonable (conservative) baseline assumption of dredging demand, taking into account the above unknown variables a twenty percent contingency has been added to the total UDM volume: see previous responses for comments regarding innovative technologies.

Comment: *VIII. Time for Introduction and Community Assessment of Alternative/Emerging Technologies and Methods is Too Short. In this period of advance where the education, testing, demonstration, cost/benefit analyses are emerging, means for up-to date, practical solutions should be fully allowed.*

Response: MCZM concurs that a means for identifying up-to-date practical solutions needs to be identified. Accordingly, MCZM has developed a process whereby the alternative treatment technology analysis will be updated and formally reviewed under MEPA every five years. As noted elsewhere, the DMMP process allows for the integration at any time, of practicable alternatives.

Comment: *IX. Can Sediment Uses Be Tied to Brownfields (Inside and Outside these Two Harbors) via Applications for Redevelopment and via Making Brownfields Processing Centers for Sediment? Interest is increasing in using sediments for brownfields, particularly along waterways, and moneys to do this should be planned.*

Response: As part of the review of alternative treatment technologies and methodologies, this DEIR included an assessment of the use of "brownfields" sites as potential sites for disposal and/or reuse of UDM. No such sites were identified as potential preferred alternative sites. In addition, DEP policy and the practical apsects of the regulations that govern the 21E process discourage the use of UDM as remediation material. See Appendix B for a discussion of the issue.

Comment: *X. Cost is a major factor; however, the DMMP does not adequately deal with cost, particularly over 20 years. Examples are inadequate cost analysis:*

- *of alternative, low-tech, low-cost technologies (short-term forward);*
- *of uses of clean and contaminated sediments (short-term forward);*
- *to fish breeding grounds (short-term);*
- *to make CDFs last longer by using sediment (long-term);*
- *of adequate public and professional education so that decisions, including from required public comment, is meaningful and industry can grow from sediment uses;*
- *of not just treatment but what the product will sell for or save (e.g., in brownfield development).*

Response: The DMMP does include a 20-year planning horizon, however, it deals with only unsuitable dredged materials, and not clean material, for which there are available practicable disposal and/or reuse

options**.** Impacts to fish breeding grounds are an important screening factor in the identification of potential aquatic disposal sites, as documented in this DEIR (Section 4.8).

Comment: *XI. The public must be involved better and early (via research from many sources).*

Regarding contaminated sediments, the public often says it does not want to pass contamination on to the future. Though they do not yet trust beneficial uses of sediment made environmentally safe and know that choices will sometimes be difficult, they want to a) know that we are doing something more, b) know we are doing something, c) want to know what those somethings are, and e) want to be able to monitor what is done so that problems will be detected and dealt with.

Regarding clean sediments, the public is accepting products (e.g., manufactured soils in Toledo).

Again, the public and professionals want to a) see what can be done--to touch and smell and see product and b) understand and help plan uses.

Response: MCZM concurs with the comment.

Comment: *XII. Public Meetings and the Draft Left Questions and Issues. Examples are:*

1. Is there Time to introduce technologies/methods and uses?

Two messages seemed to be given, one by MEPA and the other by MCZM.

Message 1. MEPA: There is time for assessment of alternatives to CADs and CDFs.

Message 2. MCZM: Technologies have been adequately assessed, there will be no time for feasibility studies of others, permitting of alternative technologies and beneficial uses will be next to impossible.

2. If sampling and analysis of the sediments has not been done, how can alternative methods be considered? That is, CADs and CDFs require less sampling, since there is less concern over what is in the sediment when they are contained and confined.

The answer was unclear, and these issues emerge from lack of up-front sampling:

1) Sampling helps determine best alternative uses, but little has been done.

2) Alternative uses must be introduced quickly in order to be considered as part of the state and local plans, which are slated for the fall of this year.

3. Is it possible to get funds for demonstration of technologies/methods and uses?

One answer was to call the State after MCZM talked to them (Salem meeting). Another was that, although the State would decide, there was little room for demonstrations and other proof of viability of beneficial uses and technologies.

4. What portion of the Seaport Bond moneys goes to each harbor and are the Harbors in danger of losing moneys if schedules are not met (e.g., If time is taken to consider alternatives)?

5. A. Why is prevention via point and non-point-source prevention and cleanup (e.g., tributaries into Salem Harbor) not part of the short- or long-term action plan?

B. Why is the Annisquam [sic] River part of the Gloucester effort, while the tributaries to Salem are not?

6. A. Why is WRDA not an issue (MCZM stated in Salem meeting that it is not).

B. Why does it apply or not apply to the five ports receiving Sea Port Bond Moneys?:

It seems that WRDA's mandate to consider beneficial uses applies to both Harbors and the Annisquam.

7. What per cent of Gloucester Harbor is federal channel?

Though USACE responsibility is probably not a key issue since all permitting for dredging must go through the USACE, it was not answered, and, instead, the question was asked to why one would want to know).

8. If sites are found that would use large volumes of sediment, is it too late to use Boston sediments, assuming that uses can be found?

9. What rules apply and don't apply to five different ports - are they similar and different?

10. What will happen to the debris and how is this a different topic than sediment (asked in the context of landfill disposition).

11. A. Is the purpose of dredging these harbor for commerce, only? If it is for environmental cleanup, issues such as the tributaries into the Salem Harbor seems relevant.

B. How do these and other purposes/goals interact with funding via other agencies for cleanup.

(Discussion on this question was poor in Gloucester, and such lack of discussion appears to be leading to frustration from fisherman and others that in my view, is great enough to lead to the "no dredging" option),

12. Why are secondary effects of dredging not discussed?

(Question from USACE, Boston District led to this answer Salem meeting, April 7.)

13. *Will attendees be provided with the attendee list? (Was provided in Salem; was not answered in Gloucester).*

14. *Since Gloucester's sewage went into the harbor for many years and is now taken into the outer harbor, several questions arise:*

    A. *What is the breakdown of the 94% pollution that was named in the public meeting in Gloucester on April 9th. What percentage is from pathogens left from sewage, from metals, from hydrocarbons, from copper paint, from pesticides, etc. ?*

    B. *Does this pose different problems than in other ports (e. g. Salem), in terms of suspension of contaminants into fishing waters?*

    C. *Do fishermen not oppose pathogens in the waterway? What impact does this have on any aspect of the DMMP plan?*

    D. *Has a common solution to the sewage and the sediment, as a common effort been considered?*

15. *MCZM stated that all materials that could be blended into sediment were assessed.*

    A. *What is that list of blending materials that have been considered?*

    B. *What were the technologies/methods and uses assessed that led to the decision that the process of blending does not prove desirable?*

    C. *Were products assessed with tipping fees, to offset costs?*

16. *Manufacturing plants can be sea based (i.e., barge) or land based (i.e., stationary or transportable). Was the statement that manufacturing sediment-based product won't work based on a full assessment:*

    A. *Were more flexible (i.e. barge and transportable) systems considered, to offset the problem of factories needing large supplies of sediment on a regular, long-term basis?*

    B. *Did manufacturers give presentations based on the situation or was assessment made in the abstract?*

    C. *What is the list of alternative technologies that were assessed for beneficial use products?*

17. *Has there been effort to assess cost in light of local efforts that might offset expenses? A few examples are HUD (e.g., in Gloucester where HUD is an active issue), historic restoration, Brownfields, marinas?*

18. *Disposal and use are different actions. They should not be referred to as "disposal/use" but*

as Disposal and Use, as separate concepts. Representing disposal/use as one concept fails to recognize that sediments are becoming a valuable resource (i.e., raw material) and that products can be selected based on problem solution. Combining them shows the need to get rid of sediment, not the growing awareness that the emphasis should be on the needs of the user of sediment-based products and the sites where they are applied. An alternative to consider is to entirely change phrasing to "Placement and Use."

19. *Scheduling of major events was unclear to most attendees. Hand outs should have been available to show steps and what must be done by given dates.*

20. *What will be done with the sediments in the CDFs to make them safe?*

21. *It has been assumed that sediments must be used by the cities where the harbors are (i.e., Salem and Gloucester). This may not be the case, if:*

    a) *Sites are made attractive, profit making, safe, especially from sediment that can be engineered to perform better than conventional materials.*

    b) *Product is deemed safe and useful, perhaps starting with clean sediment.*

22. *Can what is learned in Salem and Gloucester about alternatives to CDFs and CADS be transferred to Fall River and New Bedford?*

23. *Can practices in Boston be altered, based on advances in the other four ports? How is that introduced?*

24. *What mechanisms exist for integrating many efforts, so that a) repletion of red-tape can be avoided, b) needs of individual ports can be honored while still benefitting from common efforts, c) many missions can be met, short-term to permanently.*

Response:

1. As discussed at the MEPA scoping meeting, the purpose of the EIR is to provide a comprehensive analysis of disposal and management alternatives.

2. As discussed at the MEPA scoping meeting, sediment testing is a necessary foundation for an assessment of potential alternatives. Sediment testing was performed under the terms of the MEPA scope and the results are presented in Section 3.3.3. of the DEIR.

3. The state actively supports alternative technologies that meet reasonable feasibility thresholds. The Massachusetts STEP (Strategic Envirotechnology Program), a collaborative effort between EOEA and the UMASS system provides analytical, permitting and marketing support for viable technologies.

4. Specific projects in ports and waterways throughout the Commonwealth are included in the Seaport Bond Bill, not just projects in the four ports of Salem, Gloucester, Fall River and New

Bedford. There are no strict schedules set in the bill, and bonding authorization for a project is no guarantee that monies will be allocated in the future.

5. MCZM has been very active in the development of coastal non-point pollution prevention programs throughout the Commonwealth. Prevention of non-point pollution is an important priority and is expected to make a significant contribution to a reduction in pollution to Massachusetts waterways in the future. The Annisquam River is included in the Gloucester DMMP because of the presence of the federal navigation channel in the river.

6. The Commonwealth has held extensive discussions with the USACE regarding the potential applicability of the federal Water Resources Development Act (WRDA) to the DMMP. WRDA provisions currently do not apply in Gloucester because it applies only to federally-funded projects. Potential improvements to Gloucester Harbor were determined by the USACE to lack the economic justification required for federal involvement.

7. Approximately 7% of Gloucester Harbor is federal channel.

8. Sediments from Boston Harbor are being accommodated within the confines of Boston Harbor. There are no plans to bring Boston Harbor sediments to any other disposal sites, including any sites located in Gloucester Harbor.

9. Boston is not considered a part of the DMMP study efforts. The DMMP is being developed for all subject ports under applicable local, state and federal policy regulation. State and federal regulations are by definition consistent among the ports; local regulations are by definition specific to the individual ports.

10. Debris (items such as large metal pieces, fishing tackle, and other material found in the harbors) will be separated by the dredging contractor, and be separately disposed of. This is common to dredging projects in urban waterways.

11. Maintenance and improvement dredging projects identified in Gloucester Harbor over the next twenty years are considered to be for the purpose of maintaining or improving commerce and recreational opportunity in the ports. MCZM is currently not aware of any harbor-wide marine sediment remediation proposals for Gloucester Harbor. Project-specific remediation activities (e.g. potential project at the Marine Railway facility) will be evaluated on a case-by-case basis under the terms of the disposal site management plan. MCZM is not aware of other agencies' funding for cleanup of Gloucester Harbor.

12. Discussion of secondary impacts resulting from identified dredging projects in Gloucester Harbor are included in Section 6.0, Secondary Impact Analysis.

13. The attendance list for the Gloucester Harbor ENF scoping meeting of April 9, 1998 is included in Appendix A, following the ENF.

14. The characteristics of the sediments tested is described in Section 3.3.3 of this DEIR. The suspension of contaminants in fishing waters will be mitigated as described in Sections 8.0, 9.0 and

10.0, any impacts incurred will be temporary and of short duration. The focus of the DMMP is to find an environmentally sound disposal location for UDM and does not directly deal with the reduction of pollution from point sources.

15. Blending materials identified by specific technology vendors, such as clean sands, cement and lime, were assessed. Blending (also considered as a form of solidification and stabilization) has been used in Massachusetts to treat unsuitable sediments prior to disposal. Tipping fees were not included unless specifically identified by technology vendors.

16. The type of systems assessed were identified by specific technology vendors and included mobile, transportable systems. No local reuse opportunities were identified by MCZM in the City of Gloucester. Also a direct solicitation of interest was mailed to all municipalities within 50 miles of Gloucester and resulted in no expressions of interest. A complete list of the technologies assessed in included in Appendix D.

17. As previously noted, use of brownfields sites was included in the assessment of upland alternatives summarized in this DEIR (Section 4.7). MCZM is not aware of local efforts such as those identified in the comment that may offset expenses for treating unsuitable dredged material.

18. MCZM does not consider disposal and use to be a single concept, but has rather assessed both disposal and reuse options in this DEIR.

19. The City of Gloucester has published notices of all presentations and working meetings with the Gloucester Dredging Subcommittee.

20. The Gloucester Harbor DMMP does not include a CDF site as a preferred alternative.

21. While MCZM does not disagree with the comment, the practical reality of gaining public acceptance for a regional site has proven to be extremely difficult in the past for other major infrastructure projects in Massachusetts. MCZM's experiences in Salem regarding this approach further underscores the difficulty in garnering support for a regional disposal option.

22. Developing the EIRs for the four ports on a relatively simultaneous schedule provides the opportunity to integrate the lessons learned in each of the harbors.

23. MCZM notes that advances in dredged material management developed by the Boston Harbor project will be applied to the DMMP planning and management approach.

24. The DMMP EIRs combines the state's regulatory requirements with the substance of the CWA's requirements (as recorded in the parallel Highway Methodology concurrence letters) in a single document. With the integration of the results of local coordination, the EIRs allow MCZM to accommodate local, state, and federal interests simultaneously.

Comment: XII. Professionals and the Public Showed Misperceptions in My Discussions with Them

1. Reasons professionals cited over last weeks for not using sediment in this region must be

reassessed. Some of these cited reasons and their answers are:

S Products can not be made from salt water sediments.

Ans: They can be.

S Supply is not consistent enough to warrant manufacturing,

Ans: This is overcomeable.

S There are no processing sites.

Ans: This is not convincing, since many a complete assessment of ways to Process (e.g. transportable. passively remediating wetlands, on brownfields), creation of processing locations via dredged material, and kinds of processing are not included in the DMMP, since they were likely not know at the time of the DMMP.

S Landfills are too far away or are already using Boston Harbor materials.

Ans: Landfills

a) are not likely a preferred alternative use,
b) were not informed well (public meeting in Gloucester) that debris is not sediment and problems of debris will be solved, and
c) might be generated for special uses (profit making) and know how in design will incorporate, the use of sediments.

S If technologies were good, investors would have invested.

Ans: Investors wait for markets to be clear, and this is happening. In addition, environmental technologies are not popular with investors.

S Markets are not developed.

Ans: True, but they can be, likely starting with clean sediment and going to contaminated sediments, but not necessarily. That the need to be is further evidence that more work is needed on the plan.

Sediment may be regulated as a waste in Massachusetts.

Ans: Clear evidence exists that Congress has deemed that sediment is not a waste and policy seems unformed in Massachusetts.

Response: As noted previously, the DMMP has comprehensively assessed the efficacy of alternative treatment technologies and methodologies for treating unsuitable sediments from Gloucester Harbor, considering the current market and regulatory environment. As previously noted, it is the intent of both MCZM and the DEP to promulgate revised dredging regulations in Massachusetts in the near future.

Comment: 2. Issues that the public did not seem to understand (beyond those above) were: Why can't dredging be postponed till a) it is clear why dredging must be done, and b) alternatives are better assessed?

Why should the public accept that the state has done a complete assessment?

Why were questions not fully answered (i.e., why dredge, does WRDA play a role, what happens to the debris, etc.) or glibly responded to which stifled discussion?
Is there political payoff/Incentive? Are contracts already let for dredging and disposal? Will Ports lose money if they do not dump at sea and follow the recommended plan?

Why was the public not better informed for better involvement in public comment?

Response: Dredging is contingent on a full assessment of need and alternative disposal or management methodologies under MEPA. That process began with the filing of the ENF, continues with the publication of this DEIR and will conclude with the approval of the FEIR. The public will have the continuing opportunity to review and comment on the thoroughness of the EIR as it moves through the MEPA process.

Comment:
OUTSTANDING ISSUES, IN SUMMARY

Some leading issues (not to diminish those mentioned above).

Conventional assessment and implementation of "disposal/use" alternatives must respond to information which is so new that most professionals working with sediment need more comprehensive education.

Technologies and methods, mostly innovative, must be considered.

Integration of sediment technology/methods with uses calls for public involvement and cost assessments that is lacking in the current process. With sediment uses comes more public involvement in decision making, and old methods of public involvement are not adequate.

Sites that can use sediment products and products that can be sold must be found and involved very early.

Plans for ocean dumping are wasteful, plans for CADs and CDFs are not the safest alternative and should be rethought in order to balance them beneficial uses, full costs, environmental issues, with more public choice.

Time and money must be allowed to find out what is best to do, so all can do their best.

A change of mind-set is needed to allow for beat solutions,, to:

A. Prevent irreversible solutions that will be outdated quickly.
B. Select best alternatives, based on full public awareness.
C. Flexible planning that can include better ways as they emerge.

The science and technology of sediment management is quickly emerging. Some advances occurring in sediment use that should be incorporated into Harbor Plans are:

Lower cost, low-tech processes that yield useful practical products. Clean sediment products appear to be:

a) cost effective compared to conventional materials

b) yield products that can be engineered to do a better job than conventional materials, create jobs, beautify, and help in port development cost and pride.

Other advances emerging are:

a) Decontamination technologies at lower cost (ports and states are putting out RFPs for no more than $35 cy)
b) Indications of job creation.
c) Indications of profit from manufacturing.

Potential for interesting, aesthetic applications that are both structurally sound and environmentally safe.

Demonstrations are needed to expand the array of proven technologies and will continue to be necessary for specific sites, uses and sediments. These can be a plus for sponsoring organizations, because the public wants to know what will work and what will be safe.

Public understanding is not apparent. One-to-one interviews of citizens that offer questions that both give public education and get public opinion is needed in order to get dynamic public involvement that will lead to consensus and long-term cooperation.

Problems with CDFs as the end of the plans for the dredged material:

They put the problem off of what to do with contaminated materials off to the future;

They fill up, and new ones must be built, unless the sediments are extracted and used beneficially;

Response: See the responses to each of the summary comments, included previously in this subsection.